Application. No. 10/067,426

IN THE CLAIMS

1. (Currently Amended) A signalling system comprising a transponder including a controller for controlling the operation of the transponder, a**n active** radio transceiver coupled to the controller by way of switching means, an electric current source coupled to the controller, and a **passive** radio signal receiving means coupled to the controller for providing signals for activating the switching means to inhibit or permit the operation of the radio transceiver, a transponder interrogation station for interrogating the transponder by way of signals transmitted to, and received from, the **active** radio transceiver, and a source of switching signals receivable by the **passive** signal receiving means when in range**; and wherein the controller receives current from the electric current source without regard to whether the passive radio signal receiving means is in range**.

2. (Currently Amended) A system as claimed in claim 1, characterised in that the transponder further comprises at least one transducer coupled to the controller and a random access memory for storing data representative of information produced by the transponder**; wherein the at least one transducer is selected from the group consisting of a temperature sensor, a humidity sensor, and an accelerometer**.

3. (Previously Presented) A system as claimed in claim 2, characterised in that the transponder interrogation station has storage means for storing said data relayed by the transponder in response to an interrogation signal.

4. (Currently Amended) A system as claimed in claim 1, characterised ~~in that the radio~~

~~receiving means comprises a passive radio receiver and~~ in that the source of switching signals comprises a radio transmitter for communicating with the passive radio receiver.

5. (Previously Presented) A system as claimed in claim 1, characterized in that the transponder interrogation station and the source of switching signals operate at different frequencies.

6. (Previously Presented) A system as claimed in claim 4, characterized in that the transponder interrogation station and the source of switching signals operate at different frequencies.

7. (Currently Amended) A transponder for use in an interrogation system, the transponder including a controller for controlling the operation of the transponder, an **active** radio transceiver coupled to the controller by way of switching means, an electric current source coupled to the controller, and a **passive** radio signal receiving means coupled to the controller for providing signals for activating the switching means to inhibit or permit the operation of the **active** radio transceiver; **and wherein the controller receives current from the electric current source without regard to whether the passive signal receiving means is in range**.

8. (Currently Amended) A transponder as claimed in claim 7, characterised in that the transponder further comprises at least one transducer coupled to the controller; and a random access memory for storing data representative of information produced by the

transponder; **wherein the at least one transducer is selected from the group consisting of a temperature sensor, a humidity sensor, and an accelerometer**.

9. (Previously Presented) A transponder as claimed in claim 8, characterised in that the transponder interrogation station has storage means for storing said data relayed by the transponder in response to an interrogation signal.

10. (Cancelled)

11. (New) A transponder, comprising:

a battery;

a microcontroller connected to the battery;

a passive receiver coupled to the microcontroller;

an active transceiver; and

a switching circuit coupled to the microcontroller to receive at least one control signal from the microcontroller, and further coupled to the active transceiver to enable and disable operation of the active transceiver;

wherein the active transceiver, once enabled, receives power from the battery.

12. (New) The transponder of Claim 11, wherein the active transceiver, once disabled, does not radiate signals.

13. (New) The transponder of Claim 12, further comprising a plurality of environmental

sensors coupled to the microcontroller.

14. (New) The transponder of Claim 13, wherein the microcontroller and the plurality of environmental sensors are adapted to continue operation while the active transceiver is disabled.